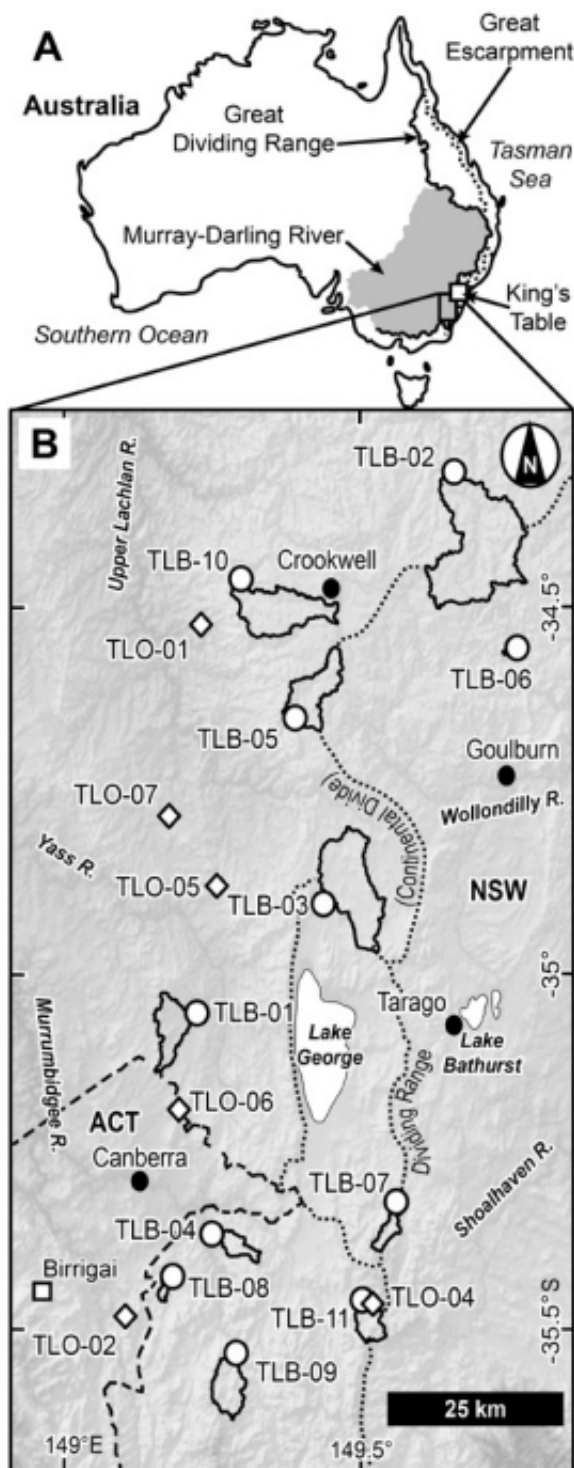


Fires did not destroy (as fast as we thought)

January 15 2016



A: Key physiographical and landscape features of the Tablelands region, southeastern Australia. B: Sampling locations of bedrock outcrops (diamonds) and fluvial sediment (white circles). Base map is the World Shaded Relief coverage (Esri). See related open-access article by Portenga et al. Credit: Base

map is the World Shaded Relief coverage (Esri). See related Open Access article by Portenga et al.

Today, people are major agents of landscape change and catalysts for erosion, but what did people do to the environment before the industrial revolution—before mechanized agriculture? The impact that indigenous peoples had on their landscapes, and when, are often difficult to determine. In this article for *Geology*, Eric W. Portenga and colleagues show that the use of fire by native Australians had little impact on the erosion of the landscapes they inhabited.

By counting atoms of beryllium-10 in rock and stream sediment samples from Australia's southeastern Tablelands and comparing them to the total amount of beryllium-10 the team was predicted they would find, they were able to model the effect of Aboriginal burning-practices on the rate of [erosion](#) in this landscape.

Portenga and colleagues found that Aboriginal burning was not intense enough, or used for long enough, to change significantly the Tablelands' natural long-term rate of landscape erosion over the preceding thousands to millions of years. They also concluded that Aboriginal burning started affecting natural erosion processes in the Tablelands only in the past few thousand years.

These findings show that in southeastern Australia, Aboriginal impact on the [landscapes](#) was much less and much more recent than previously thought.

More information: A late Holocene onset of Aboriginal burning in southeastern Australia, Eric W. Portenga et al., School of Geographical and Earth Sciences, University of Glasgow, Glasgow G12 8QQ, UK.

This article is OPEN ACCESS online at
<http://dx.doi.org/10.1130/G37257.1>.

Provided by Geological Society of America

Citation: Fires did not destroy (as fast as we thought) (2016, January 15) retrieved 2 May 2024
from <https://phys.org/news/2016-01-fast-thought.html>

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